

ABSTRACT OF THE DISCLOSURE

An apparatus and method for equipping a locomotive with a modular radio communication system capable of being expanded to incorporate future improvements in radio and data communication electronics. The modular radio communication system provides for the installation of a standardized mounting plate and housing onto the rooftop of the locomotive to reduce the need to make extensive mechanical and electrical modifications to the locomotive when the radio communications system is updated. Sunscreens and vent openings in the standard mounting plate and housing work to reduce the temperature of the internal components of the modular radio communications system.

LEGEND FOR ILLUSTRATIONS

1	locomotive	14	second plurality of vent openings
2	cab	15	mounting screws
5 3	roof	20 16	mounting screws
4	locomotive controls	17	risers
5	modular radio communication unit	18	spacer
6	communications hub	19	air ventilation gap
10 7	serial cable	20	radio electronic compartment
8	standard mounting plate	25 21	radio electronic unit
9	first sunscreen	22	first insulating air gap
10	second sunscreen	23	second insulating air gap
11	antenna dome	24	antenna
15 12	housing	25	antenna RF coaxial cable
13	first plurality of vent openings		
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